

KAWAI

DIGITAL MIDI SEQUENCER

Q-50

OWNER'S MANUAL

Introduction

Thank you for purchasing the Kawai Q-50 MIDI Sequencer.

By connecting the Q-50 to your MIDI keyboard, you can record and playback your keyboard performances.

The Q-50 is easy operation. Paired with a digital piano, the Q-50 is the perfect partner for practicing or composing. To enjoy long and trouble-free use, please read this manual carefully, and save it for later reference.

Features

- Record and store up to 16 songs in internal memory.
- Re-record additional parts onto previously recorded material (multitrack recording).
- Select from two methods of recording; mode 1 for the beginner and mode 2 for the expert.
- Internal memory capacity of up to 11,000 notes.
- Use KQD-1 quick disks (sold separately, one included) to store additional song data. (Each disk can store up to 22,000 notes.)

Precautions

■ Location

Using the unit in the following types of locations can cause malfunction:

- direct sunlight
- extremely high or low temperatures
- excessive dirt or dust
- heavy vibration

■ Power supply

Be sure to use only the power unit included with the Q-50, and connect it to an AC outlet with the proper voltage.

Make all connections with the power switched off for all equipment.

Avoid sharing the same AC outlet with devices that consume large amounts of power or generate noise.

■ Interference with other devices

The Q-50 contains advanced digital circuitry. Radios or televisions operated near the Q-50 may receive electromagnetic interference. Position the Q-50 at a suitable distance from such devices.

■ Cleaning

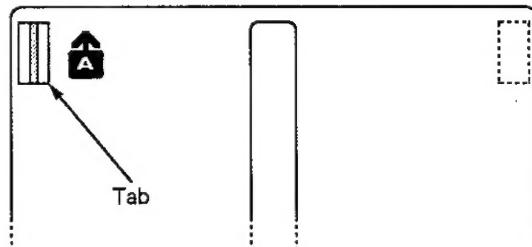
If the unit becomes dirty, clean it with a soft dry cloth. Do not use solvents such as benzene or thinner.

■ Handling quick disks

Quick disks store data on a thin sheet of magnetic material. As this sheet is very delicate, the following precautions should be observed:

- Do not touch the magnetic disk surface. If it becomes dirty or dusty, the data may be lost or become unreadable.
- Do not allow the disk to come near magnetic fields (speakers, televisions, etc.).
- Store the disk at temperatures between 10–50 °C. Do not leave disks in a closed automobile.
- To avoid accidental loss of important data, protect the disk except when saving data.

By breaking off the write protect tab, you can protect important disks from accidentally being erased. If you break off the tab, it will be impossible to store new data on that disk. If you want to store other data on the disk, stick a piece of tape over the tab area.



- When the disk indicator LED is lit, the disk drive is operating. While this is lit, do not remove the disk or turn the power off. Doing so will damage the disk and make it unreadable.
- As a safeguard, it is a good idea to make backup copies of important data disks.

Introducing the Q-50

What is a MIDI sequencer?

A MIDI sequencer is a device that records the notes you play on MIDI keyboard (a digital piano such as the MR3000, or a synthesizer such as the K1 II), and plays back the recorded data to make a MIDI instrument (digital piano, synthesizer, etc.) produce sound. The Q-50 can be connected only to MIDI-equipped devices.

This section is a brief explanation of sequencers.

Tempo control

It is usually not possible to change the tempo of a musical performance recorded on tape. Even if it were possible, changing the tempo would also affect the pitch. With sequencers, however, the playback tempo can be freely modified without affecting the pitch. This means that you can record a difficult song at a slow tempo and play it back at a faster tempo.

Instant song access

A sequencer allows you to instantly find the song you want. Unlike a tape recorder, there is no tape to be rewound. You can instantly select and play any one of the (maximum) 16 songs in the Q-50's memory.

Re-record without loss of sound quality

Unlike a tape recorder, a sequencer can re-record a song as many times as you want without any loss in sound quality since it records and stores your musical performance as digital data.

Playback with a different sound than when recording

The musical data played back by the Q-50 merely tells the MIDI device (digital piano or synthesizer) which notes to play. By switching sounds on your digital piano or synthesizer, your recorded performance can be played back by a different sound. For example, you could record a piece with your instrument playing a piano sound, and playback with your instrument playing a strings or brass sound. This is one of the unique capabilities that a sequencer offers.

Creatively using the Q-50

You can record another person's performance on the Q-50 and use it as an example with which to practice. Quick disks containing recorded songs can be exchanged with your friends, opening up new opportunities for exchanging musical ideas.

Your imagination will suggest other creative ways to use the Q-50.

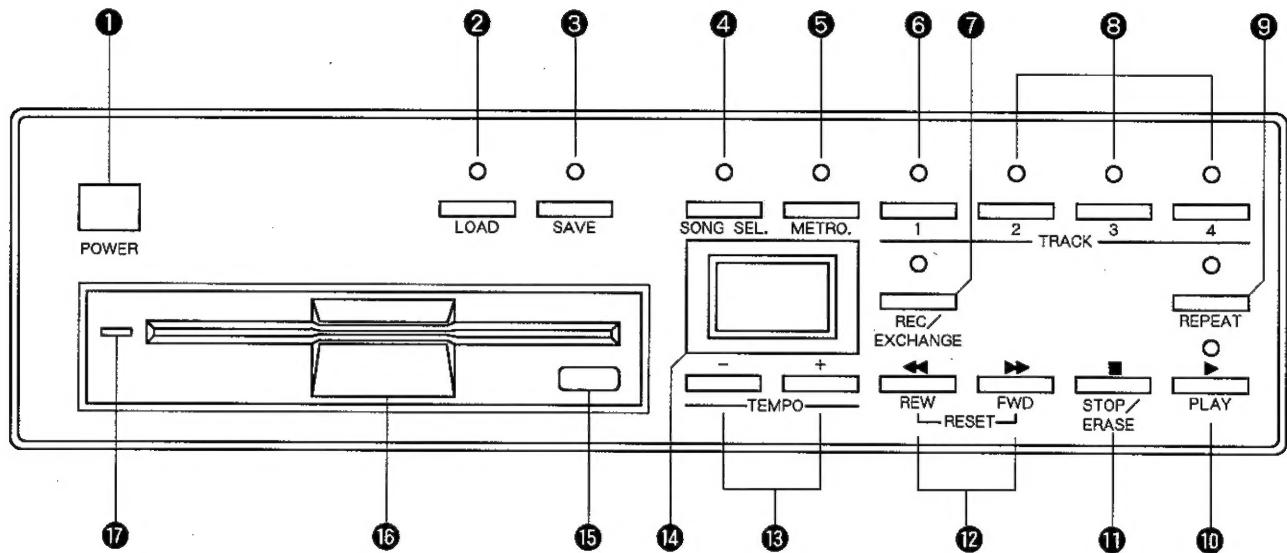
In order to experiment with the many possibilities offered by the Q-50, you will need to know how it operates. So, please take time to read the following explanation of its basic operation.

CONTENTS

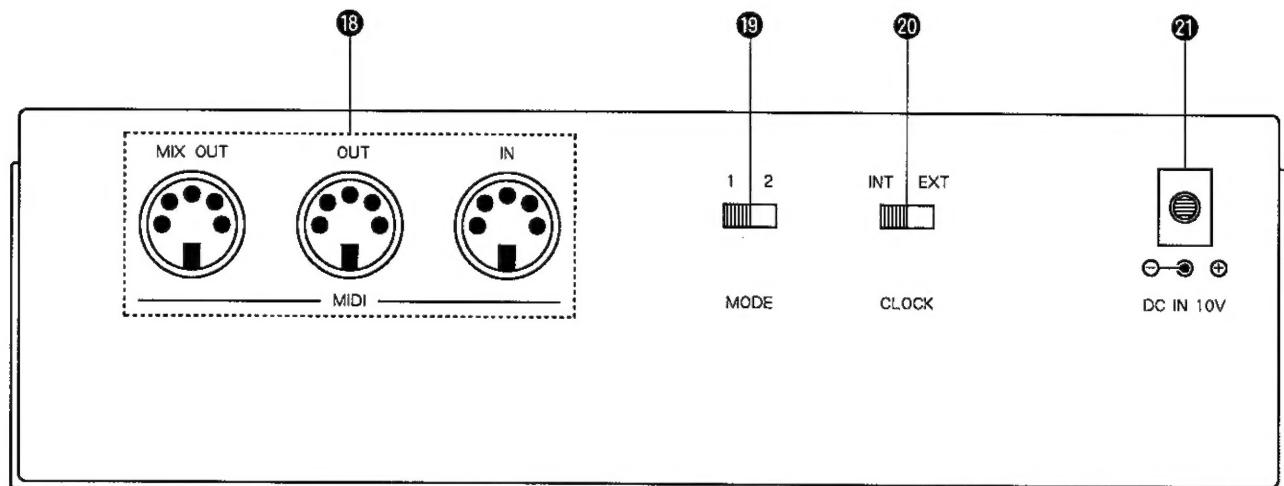
Features	
Precautions	
Introducing the Q-50	
Front/Rear Panel	1
Front Panel	2
Rear Panel	2
Connections	3
Easy Operation	4
Basic Operation (Using Mode 1)	6
The Basics of Using the Q-50	6
Record	8
Playback	11
Using Quick Disks	14
Advanced Operation (Using Mode 2)	17
Overdub Recording	18
Exchanging Tracks	27
About MIDI	33
Troubleshooting	36
Error Codes	37
MIDI Implementation Chart	39
Specifications	40

FRONT/REAR PANEL

■ Front panel



■ Rear panel



Front Panel

① **POWER** switch

This turns power of the Q-50 on/off.

② **LOAD** button

This button loads data from a quick disk into Q-50 memory.

③ **SAVE** button

This button saves data from Q-50 memory to a quick disk.

④ **SONG SEL.** button

This button selects the desired song.

⑤ **METRO.** button

Use this button to turn the metronome on/off and also to select the type of metronome.

⑥ **TRACK** button ①

Use this track to record your musical performance.

⑦ **REC/EXCHANGE** button

Press this button to record. ("Advanced Operation" explains how to use this button to exchange data.)

⑧ **TRACK** buttons ② – ④

These tracks can contain pre-recorded model performances. (You can also transfer the data you recorded on track 1 to these tracks. "Advanced Operation" explains how to use these buttons.)

⑨ **REPEAT** button

Use this button to continuously playback a favorite song.

⑩ **PLAY** (►) button

Press this button to begin playing back the recorded tracks.

⑪ **STOP/ERASE** (■) button

Press this button to stop recording or playback. ("Advanced Operation" explains how to use this to erase data.)

⑫ **REW** (◀◀), **FWD** (▶▶) buttons

Use these buttons to move backward or forward through a song. Press both buttons together to move to the beginning of the song.

⑬ **TEMPO** buttons – +

Use these buttons to adjust the tempo.

⑭ **Display**

This displays the song number, tempo, etc.

⑮ **Eject** button

Press this button to eject the quick disk from the disk drive.

⑯ **Quick disk drive**

A quick disk can be inserted into this drive to load or save data.

⑰ **Quick disk indicator**

This lights when the quick disk drive is operating.

Rear Panel

⑯ **MIDI terminals**

• IN terminal

Connect the MIDI OUT or MIDI THRU of a keyboard (digital piano, etc.) to this terminal.

• OUT terminal

Connect the MIDI IN of a keyboard (digital piano, etc.) to this terminal.

• MIX OUT terminal

Connect the MIDI IN of a keyboard (digital piano, etc.) to this terminal.

⑲ **Mode select switch (MODE 1/2)**

This switch selects between the two operational modes of the Q-50. Mode 1 is explained in "Basic Operation" (page 6–16), and mode 2 is explained in "Advanced Operation" (page 17–32).

⑳ **Clock select switch (CLOCK INT/EXT)**

This switch selects between INT and EXT clock. "About MIDI" (page 33–35) explains the details of clock selection. Normally you will set this switch to INT.

㉑ **Power supply terminal (DC IN 10V)**

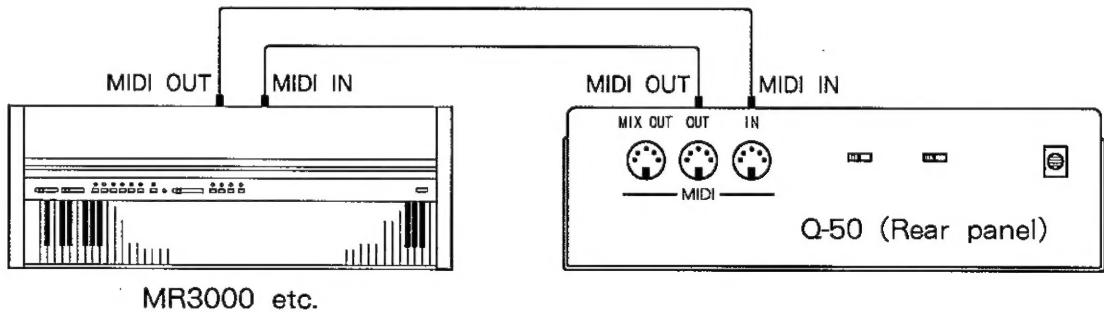
Connect the included power supply to this terminal.

CONNECTIONS

The simplest way to use the Q-50 is to connect it to a single MIDI keyboard. As an example, here we will explain how to connect the Q-50 to a digital piano.

★For an example of how this connection can be used, refer to page 33.

Connecting a digital piano (Kawai MR3000 etc.)



Use MIDI cables to connect the MIDI OUT of the digital piano to the MIDI IN of the Q-50 and connect the MIDI IN of the digital piano to the MIDI OUT of the Q-50.

EASY OPERATION

Let's get started right away and record a simple melody!

To try out your new Q-50, follow the steps as explained below. When you have finished connecting your keyboard, turn the Q-50 power on.

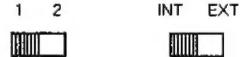
★Before turning the Q-50 power on, re-check the following points.

(1) Look at the Q-50 rear panel.

→ Is CLOCK set to INT?

→ Is MODE set to 1?

→ Are the MIDI cables connected correctly?
(see page 3)



MODE

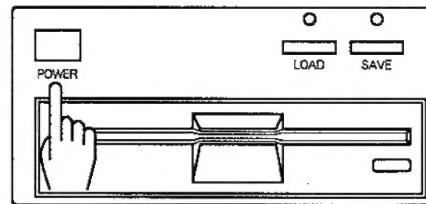
CLOCK

(2) If you are using the Q-50 for the first time, there will be a protective sheet inserted into the quick disk drive. Press the eject button to remove it.

(3) Prepare your keyboard for playing (refer to keyboard owner's manual, if necessary).

Step 1

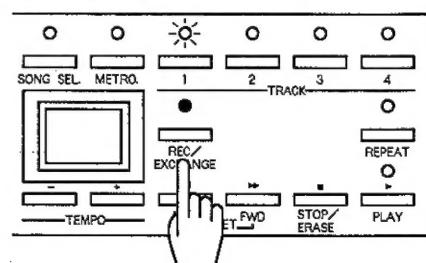
Turn on the power of the keyboard and the Q-50.



Step 2

Press the **REC/EXCHANGE** button. The Q-50 is now in record standby.

Press the button and the LED will light. At the same time, the track **1** LED will begin blinking.

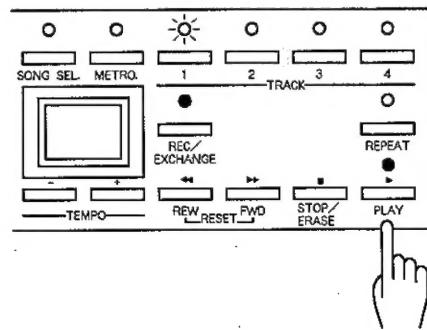


Step 3

Press the **PLAY** (►) button and recording will begin.

When you press the button, the LED will light. At the same time, the display located in the center of the panel will advance and recording will begin.

Go ahead and play a melody or chords.

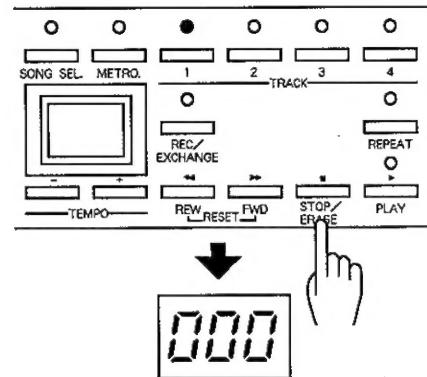
**Step 4**

Press the **STOP/(ERASE)** (■) button and recording will end.

The **PLAY** (►) and **STOP/ERASE** (■) LED will go off. At the same time, the track **1** LED will stop blinking and remain lit. Recording will end.

The display will show "0", indicating that you have returned to the beginning of the song.

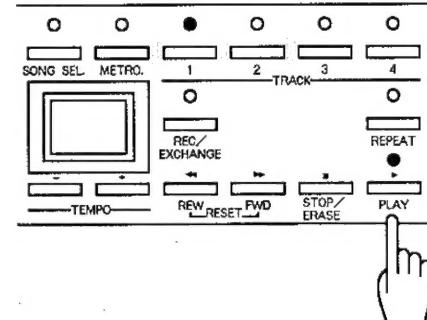
Now let's play back what you just recorded.

**Step 5**

Press **PLAY** (►) and playback will begin.

When you press the button, the LED will light and you should hear the song you just recorded. If not, re-check the connections as explained in "Connections" (page 3), re-read the explanation up to this point, and try again.

If your song played back correctly, continue to the next chapter, "Basic Operation".



BASIC OPERATION (USING MODE 1)

The Basics of Using the Q-50

Before we explain the actual operations, we will explain some of the words which will appear in this manual and some basic concepts.

Songs and tracks

The Q-50 can record and remember 16 songs. Each song consists of four "tracks". These tracks are divided into two groups: a recording track (1) and three playback tracks (2 – 4).

When recording your own playing, you will always use track (1). The data recorded on this recording track can be transferred to one of the playback tracks (tracks 2 – 4). This is known as "exchanging" tracks. The details are explained in "Advanced Operation". In this basic operation section, you will learn how to use track 1 only.

Switching modes

By switching between the two modes, you can use the Q-50 in two different ways. In this "Basic Operation" section, we will explain how to use mode 1.

(The following "Advanced Operation" section will explain how to use mode 2.)

After you become familiar with mode 1, you can continue to the advanced section. The MODE switch located in the center of the rear panel selects the mode. For this example, make sure that the switch is set to "1".

What you can do in mode 1

① Record on track 1

Select a song (1 – 16) and record your playing on the recording track (track 1). With each new song you select, you can record another performance on track 1.

★In mode 1, it is not possible to layer new playing on top of an existing recording. Every new recording will completely erase the old data, replacing it with the newly recorded data.

If you have recorded a performance you would like to keep, select a different song number for your next recording to avoid erasing the data already recorded.

② Playback the recording track (track 1)

You can playback the song you recorded on the recording track (track 1) at any desired tempo. You could record a difficult song at a slow tempo and then increase the tempo when playing it back.

③ Save data to a Quick Disk/Load data from a Quick Disk

The songs in Q-50 memory can be saved on the included quick disk (KQD-1).

★*The internal memory of the Q-50 can contain up to 16 songs, but this data will be lost when the power is turned off. Be sure to save important data to a quick disk before turning off the power.*

Data saved on a quick disk can be loaded into Q-50 memory at any time.

Record

Here we will explain the recording procedure in more detail.

■ Recording standby

Step 1

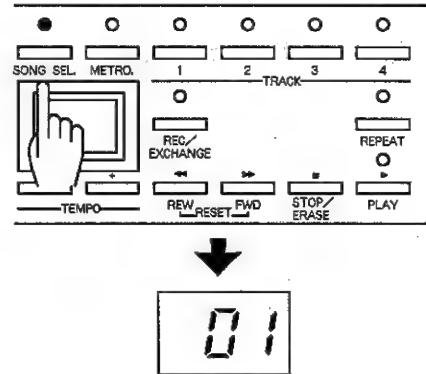
Select a song number.

Press the **SONG SEL.** button once. The display will change from the counter to the song number.

Select the song number 1–16 that you wish to record. Each time you press the **SONG SEL.** button, the number in the display (the song number) will advance from.

[01] → [02] → [03] → ⋯ [16] → [01] ⋯

In this example, select song number “1”.



★If you select a song that has already been recorded, the track LEDs will light to indicate tracks which already contain data.

Step 2

Set the metronome.

If you want to hear the metronome while you record, set the metronome as follows.

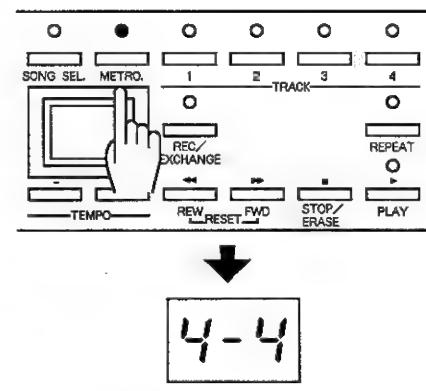
① Press the **METRO.** button.

When you press **METRO.** once, the display will change from the song number to the metronome setting.

② Each time you press **METRO.**, the display (time signature) will change as follows and the selected time signature will sound.

[OFF] → [1 – 4] → [2 – 4] → [3 – 4] → [4 – 4] → [6 – 8] → [OFF] → ⋯

Select the time signature in which you wish to play in. (If you select “OFF” the metronome will not sound.)



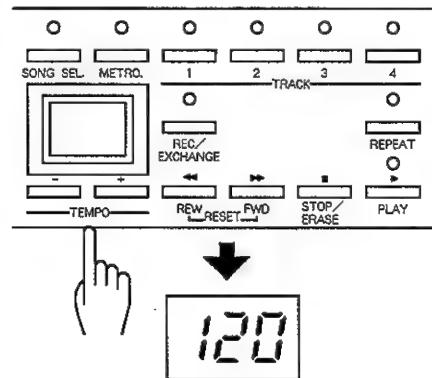
★Once you set the metronome, it will continue sounding until you select “OFF”. So, it is possible to use the Q-50 as a metronome alone. However, the metronome will automatically be turned off when you press **SONG SEL.** to select a song or when data is read from disk. It will also stop while data is being stored to disk.

★If a time signature (i.e., the “standard time signature”) has been specified for the song that is read from disk, the metronome display will be as follows. (For details on the standard time signature, see page 20.)

[OFF] → specified time signature → [OFF] → ⋯

Step 3**Set the tempo.**

Press either of the TEMPO buttons **[-]** **[+]** once, and the display will change from the metronome (time signature) to tempo. Use the **[-]** **[+]** buttons to set your desired tempo for recording.

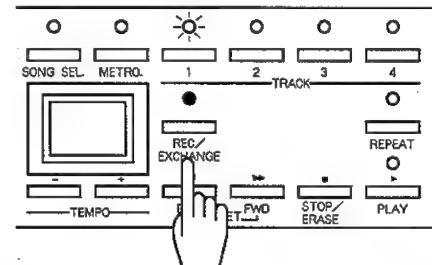


★When the power is turned on, the setting will be $\text{J}=120$.

Start recording**Step 1**

Press the **[REC/(EXCHANGE)]** button.

The LED will light and the recording track (track 1) LED will begin blinking. The counter display will return to "0" and the Q-50 will enter record standby.



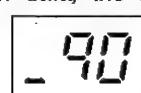
★While you are pressing the **[REC/(EXCHANGE)]** button, the amount (%) of remaining internal memory will be displayed.

★Immediately after the power is turned on, or when no tracks contain data, the maximum remaining memory will be 92%.

(If 90% remains, the display will be as right.)

★If you decide not to record, press the **[STOP/(ERASE)]** (■) button.

★While the **[REC/(EXCHANGE)]** button is lit, it is not possible to fastforward or rewind, or change the time signature or tempo. In order to perform these operations, you must first press **[STOP/(ERASE)]** to stop recording.



Step 2**Start recording.**

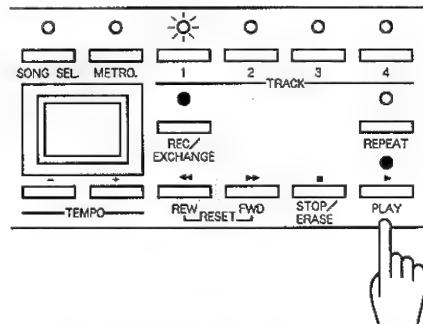
There are two ways to start recording.

① Press the **PLAY** (►) button.

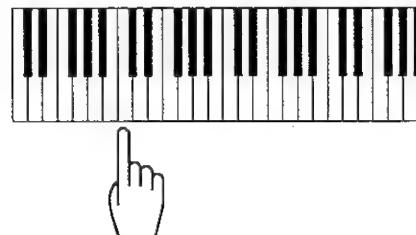
Recording will begin when you press the button.

② Begin playing the keyboard.

When you begin playing the keyboard, recording will begin at the instant the first note is played.



or

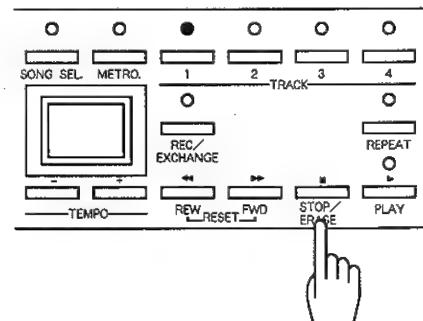


When recording begins, the display counter will advance just like the counter of a cassette recorder.



★When the amount of free space in internal memory decreases to less than approximately 100 notes, the display will begin blinking as a warning. When there is no more free memory, recording will automatically end. If this occurs while you are using the Q-50 in mode 1, the music you have been recording will be lost, and you will have to re-record from the beginning.

★While recording, the counter display can advance up to "999". After that, recording will automatically stop.

Step 3**Press the **STOP/(ERASE)** button.**

★To stop the metronome, press the **METRO.** button and select "OFF".

Playback

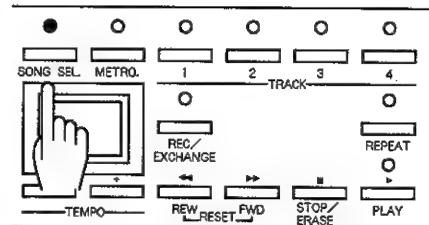
■ Playback standby

To playback the song you just recorded, follow the procedure from [Step 3] explained below.

Step 1

Select the song number.

As explained in "■ Recording standby" (page 8), use the **SONG SEL.** button to select the song number you wish to playback.

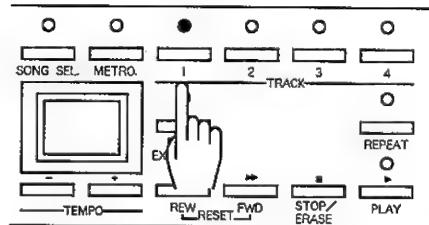


Step 2

Select tracks.

Press the track buttons to select the tracks you wish to playback.

If a track contains data, its LED will be lit. Each time you press a track button, the LED will go on or off. This determines whether or not that track will playback. (A lit LED indicates that the track will playback.)



Press the buttons of the tracks you wish to playback
(In this example, track 1 has been selected.)

- ★ If a track contains no data, its LED will not light even if you press the track button.
- ★ If data has been loaded into the Q-50 from a quick disk you saved in mode 2, tracks 2-3 may contain data.

Step 3

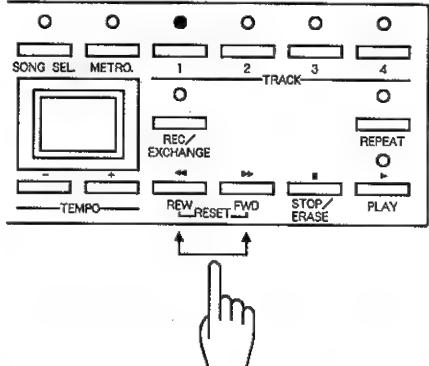
Set the counter.

Set the counter to the location where you want to begin playback.

To advance the counter, press **FWD** (►►). The counter will continue to advance as long as you press the button.

To reverse the counter, press **REW** (◀◀). The counter will continue to move toward "000" as long as you press the button.

If you press both **REW** (◀◀) and **FWD** (►►) at once, you will return to the beginning of the song.

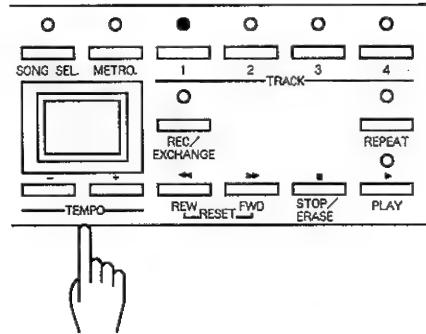


Press either button, or both at once

- ★ If you want the metronome to sound during playback, press the **METRO.** button and select the time signature (page 8).

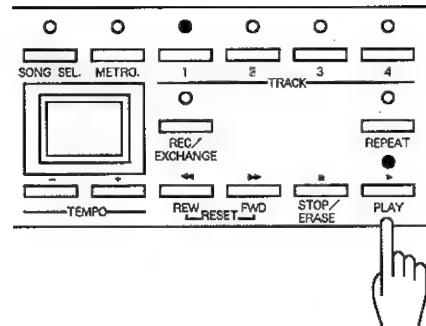
Step 4**Set the tempo.**

Press the tempo buttons **[-]** **[+]** to set the tempo for playback.

**Start playback****Step 1**

Press the **PLAY** (►) button.

The LED will light, and the song will begin playing back.



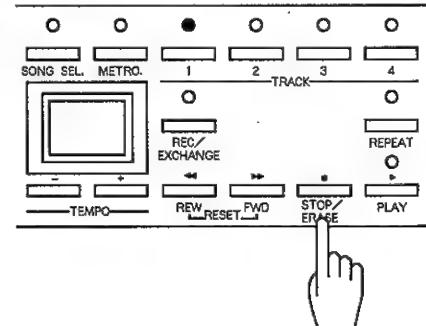
★While the song is playing, you can use the tempo buttons to modify the tempo.

★During playback you can also fast-forward or rewind. (If you press **FWD** (►►) during playback, the song will be played back at double speed, and will return when you press **REW** (◀◀). When the counter returns to "0", the **PLAY** (►) button will go off, and the Q-50 will stop.)

Step 2

Press the **STOP/(ERASE)** (■) button.

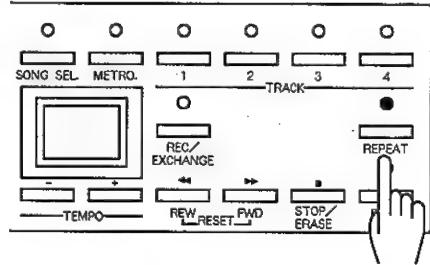
To stop playback before the end of the song, press the **STOP/(ERASE)** (■) button. The playback button LED will go off.



★When song playback ends, the playback button LED will automatically go off and playback will stop.

■ Repeat playback

Press the **REPEAT** button to turn the LED on, and then press **PLAY** (►). The song will continue repeating from beginning to end.



★To stop the song from repeating, press the **REPEAT** button once again to turn the LED off.

■ Chain repeat

If you insert a disk containing songs and turn the power on while pressing the **REPEAT** button, the REPEAT button will light, and all songs in the inserted disk will be automatically read into memory and played successively (chain repeat).

★During chain repeat playback, pressing buttons other than the **STOP/(ERASE)** (■) button will have no effect. When you press **STOP/(ERASE)** (■), playback will stop, chain repeat will be turned off, and Q-50 operation will return to normal.

Using Quick Disks

■ The Q-50's memory capacity

The Q-50's memory now contains the song you have just recorded. Memory can contain up to 16 songs for an approximate total of up to 11,000 notes.

However, if you use up the total memory before recording 16 songs, no more songs can be recorded.

The data in the Q-50's memory will be lost when the power is turned off. For this reason, be sure to save your important data to a quick disk.

■ About quick disks

① Quick disks are very delicate. Be sure to read the handling precautions on "Handling quick disks".

② Like cassette tapes, quick disks have two sides: A and B. Insert the disk into the drive with the side to be used facing up.

- When storing data from the Q-50 onto a quick disk, all internal memory data will be stored on one side of a quick disk. Whenever new data is stored on a quick disk, the new data will erase any previously recorded data.

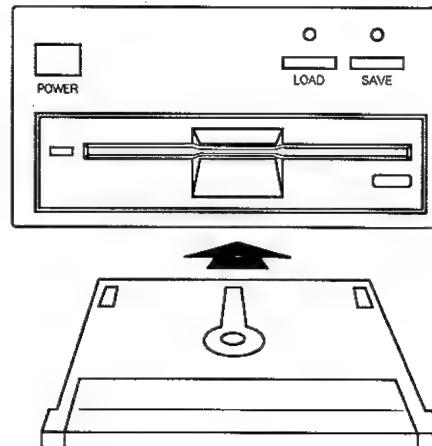
If a disk contains important data that you do not want to lose, break off the tab.

- When loading data from a quick disk into the Q-50, all data on one side will be loaded into the Q-50. If the Q-50 memory already contains data, that data will be lost.
- A single side of a quick disk contains the same amount of data as the Q-50 memory. There is no danger that data will not fit onto disk or into Q-50 memory.

③ Quick disks are also sold separately. We recommend that you purchase Kawai quick disks (KQD-1).

■ Saving data to disk

Step 1 Insert the quick disk into the disk drive with the side to be used facing up.



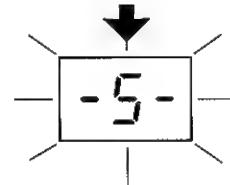
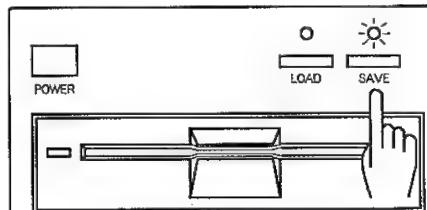
★When using the Q-50 for the first time, the disk drive will contain a protective sheet. Press the eject button and remove it. (When transporting the Q-50, please re-insert this protective sheet.)

★While the disk indicator is lit, do not turn the Q-50 power off or remove the disk.

Step 2

Press the **SAVE** button.

The LED will light and the display will blink “-S-”, indicating that the Q-50 is ready to save data.

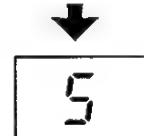
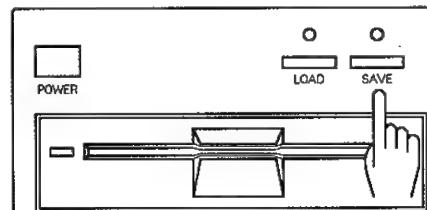


★If you decide not to save, press the **STOP/(ERASE)** (■) button.

Step 3

Press the **SAVE** button once again.

The LED will go off, the display will change to “S”, and the Q-50 will begin saving all the data in memory to the quick disk.



★Saving will take about 8 - 10 seconds.

When saving is completed, the display will once again become a counter display.

All the songs you recorded have now been saved to the quick disk. Of course, the Q-50 memory still contains the data.

■ Loading data from disk

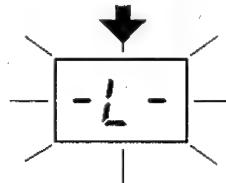
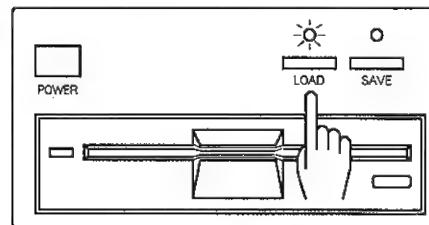
Step 1

Insert the quick disk into the disk drive with the side to be used facing up.

Step 2

Press the **LOAD** button.

The LED will light and the display will begin blinking “- L -”, indicating that the Q-50 is ready to load data.

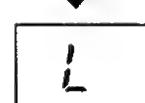
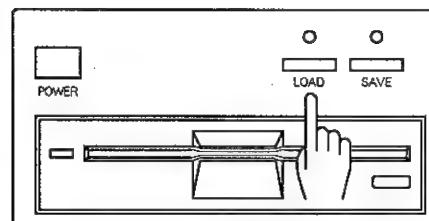


★If you decide not to load, press the **STOP/(ERASE)** (■) button.

Step 3

Press the **LOAD** button once again.

The LED will go off, the display will change to “L”, and the Q-50 will begin loading all the data from one side of the disk into Q-50 memory.



★Loading will take about 8-10 seconds.

When loading is complete, the display will indicate song number “1”.

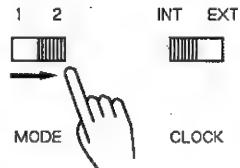
All the data from one side of the quick disk has now been loaded into Q-50 memory. Of course, the quick disk still contains the data you just loaded into the Q-50.

★For long songs, it may take several seconds for the song display to return.

★If you insert a disk while the Q-50 power is turned off and then turn the power on, the data on disk will automatically be loaded into the Q-50.

ADVANCED OPERATION (USING MODE 2)

In the "Basic Operation" section, you learned how to use mode 1. In this "Advanced Operation" section, you will learn how to use mode 2. Set the MODE switch on the rear panel to "2".



■ What you can do in mode 2

In addition to the functions of mode 1, mode 2 allows you to do the following things.

① Overdub onto the recording track (track 1)

In mode 1, the old recording is replaced by the new data each time you record on track 1.

In mode 2, it is possible to record layer upon layer or "overdub" new material onto the old. This means that you can play along while listening to a previously recorded track -- and your new playing will be added to the previous recording. You can repeat this as many times as you like, allowing you to build complex passages that would be impossible to play at once.

② Exchange the recording track (track 1) data with a playback track (tracks 2–4)

The music you recorded on the recording track (track 1) can be transferred to any of the playback tracks (tracks 2–4). This means that you can build songs consisting of up to 4 tracks. For example, the left hand accompaniment could be on track 1, the main melody played by the right hand on track 2, a counter-melody on track 3, and harmony on track 4.

③ Set a tempo for each song

You can set a tempo for each song and store that tempo information along with the rest of the song data. It is also possible to set a tempo and store it even after a song has been recorded. If you store the tempo for a song, the song will be played back at the correct tempo every time.

In this section on advanced operation, we will use these "exchange" and "overdub" functions to record the following song.

Overdub Recording

Record standby

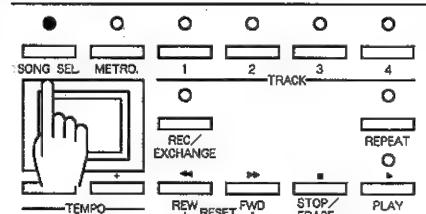
Step 1

Select the song number.

Select the song number (1 – 16) you wish to record. Each time you press the [SONG SEL.] button, the number in the display (the song number) will change from

[01] → [02] → [03] → ⋯ [16] → [01] ⋯

For this example, select "2".



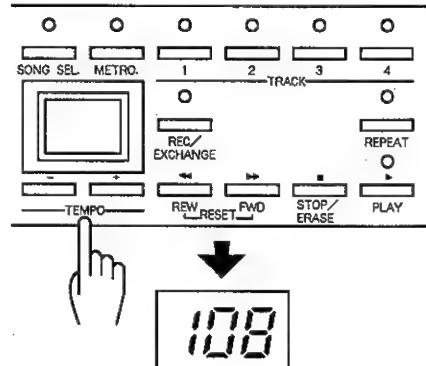
02

Step 2

Set the tempo.

Use the TEMPO buttons [–] [+] to set the tempo to $\text{J}=108$.

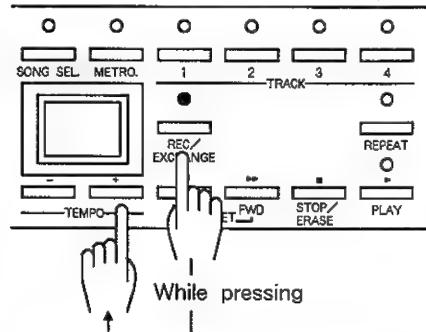
If you set $\text{J}=108$ as the standard tempo, you will be able to instantly recall $\text{J}=108$.



『Setting a standard tempo』

While pressing the [REC / EXCHANGE] button, press the [+] button. This will set the currently selected tempo as the standard tempo for this song. A dot in the lower right section of the display indicates that the standard tempo has been set.

To recall the standard tempo, simultaneously press the TEMPO [–] [+] buttons.



While pressing [REC / EXCHANGE],
press TEMPO [+].



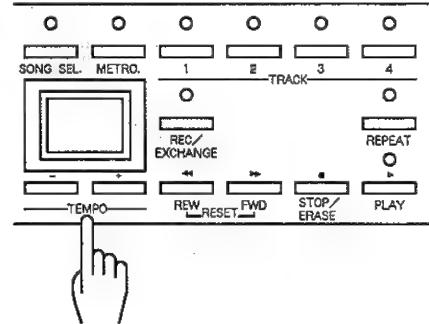
108.

★When you set a standard tempo, the previously set tempo will be erased.

《Erasing the standard tempo》

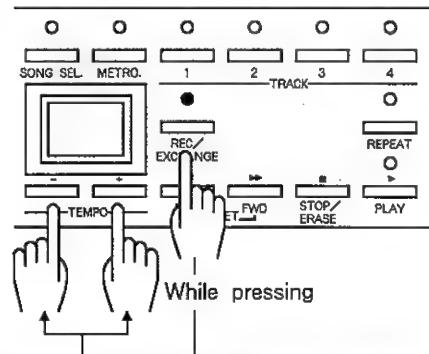
Here's how to erase the standard tempo after setting it.

① Press the TEMPO button, and the display will show the tempo.



② While pressing the [REC / EXCHANGE] button, press both [-] and [+] buttons.

This will erase the standard tempo.



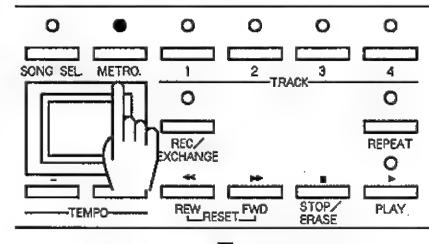
While pressing the [REC / EXCHANGE],
press both TEMPO [-] and [+].

Step 3

Set the metronome.

If you want to hear the metronome while recording, choose the appropriate time signature. This automatically turns the metronome on. In this example, select "4-4".

The metronome will begin sounding at "4-4". It is also possible to set "4-4" to be the standard time signature.



『Setting a standard time signature』

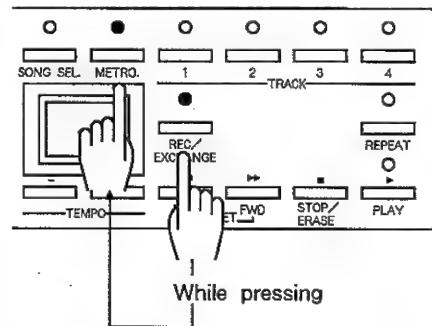
While pressing the **[REC / EXCHANGE]** button, press the **[METRO.]** button. This will set the currently selected time signature as the standard time signature for this song. A dot in the lower right section of the display indicates that a time signature has been specified for this song.

If a time signature has been specified for the song, each time you press the **[METRO.]** button the display will change as follows:

[OFF] → specified time signature → the time signature after the specified time signature → ...

(Example: when the specified time signature is "4 - 4")

[OFF] → [4 - 4] → [6 - 8] → ...



While pressing **[REC / EXCHANGE]**,
press **[METRO.]**



4 - 4.

★When you set a standard time signature, the previous setting will be erased.

■ Start recording

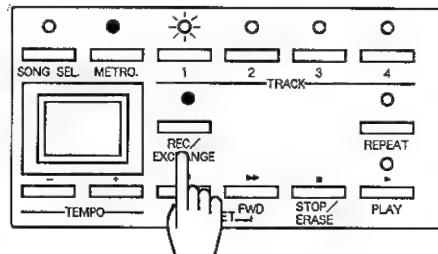
● Recording the first part

First we will record measures 1 and 2 of the left-hand part.

Step 1

Press the **[REC / EXCHANGE]** button.

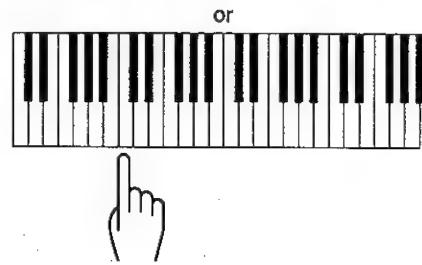
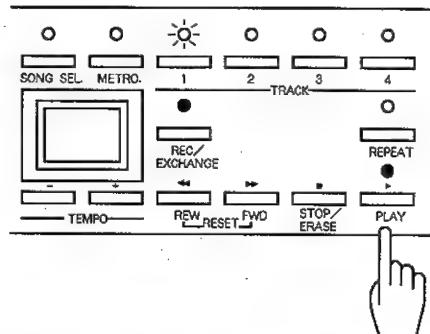
The LED will light, and the recording track (track 1) LED will begin blinking.



★While the **[REC/(EXCHANGE)]** button is lit, it is not possible to use the fast forward or rewind buttons, nor modify the time signature or tempo. To perform these operations, you must first press **[STOP/(ERASE)]** (■) and stop recording.

Step 2**Start recording.**

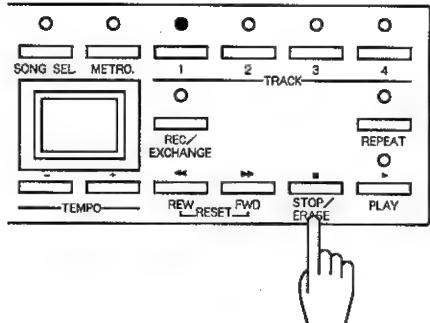
There are two ways to start recording: (1) You can press the **PLAY** (►) button and then begin playing, or (2) you can simply begin playing the keyboard and recording will automatically begin.



When recording begins, the display counter will advance.
(If you started recording by pressing the **PLAY** (►) button, simply begin playing.)

**Step 3**

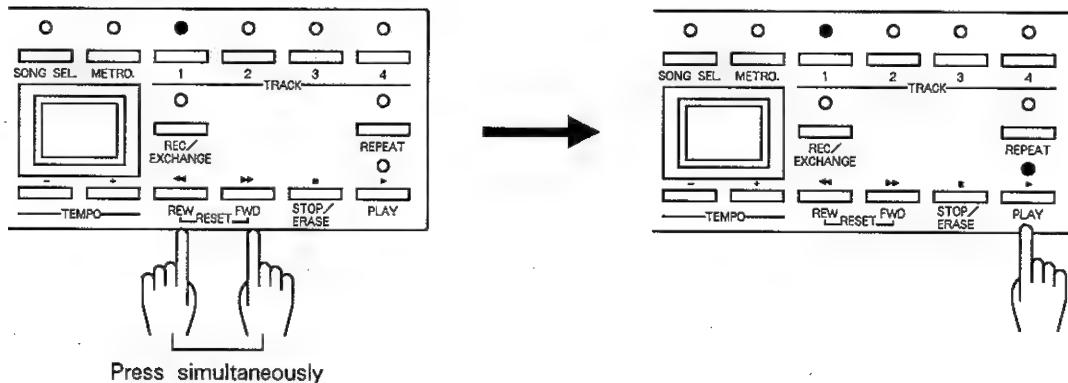
Press the **STOP / (ERASE) button when you are through recording.**



★The procedure up to this point is the same as explained in "Basic Operation" (mode 1).
★In mode 2, pressing the **STOP/(ERASE)** button to stop recording will not return the counter to "0".

Step 4

Return the counter to 0, and playback.



★During playback you can use the **[-]** **[+]** buttons to modify the tempo.

★During playback you can also fast-forward and rewind. (Press **FWD** (▶▶) during playback and the song will be played at double the current tempo. Press **REW** (◀◀) and the counter will return. When the counter reaches "0", playback will stop and the **PLAY** (▶) button will go out.)

If you make a mistake ...

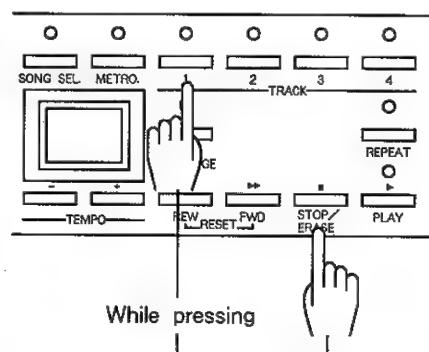
If you made a mistake while recording, you can re-record. In mode 2 (unlike mode 1), you will need to "erase" the data before re-recording.

«How to erase»

To erase, we will use the **STOP/(ERASE)** (■) button. (The same button that we have been using to stop playback and recording.) This function allows you to erase the contents of any track 1 – 4. In this example, we will show how to erase the contents of the recording track (track 1).

- ① While pressing the **STOP/(ERASE)** (■) button, press the button of the track you wish to erase (in this example, track 1).
- ② The LED of the recording track (track 1) will go out, indicating that the data has been erased.
- ③ Repeat [Step 1] – [Step 3] to re-record.

For long recording, erasing will require a few seconds.



While pressing the **STOP/(ERASE)** (■) button, press the button of the track you wish to erase.

● Recording the second part

For the second part, we will use the “overdubbing” capability of the Q-50 to record the left-hand part for measures 3 and 4.

Step 1

Simultaneously press the **REW** (◀◀) and **FWD** (▶▶) buttons to return the counter to the beginning.

Step 2

As you did when recording the first part, press the **REC/(EXCHANGE)** button. Then, press the **PLAY** (▶) button.

The first part you recorded will be played back. At the same time, recording will begin.

When measures 1 and 2 have finished playing back, play measures 3 and 4 in time with the metronome.

Step 3

Press the **STOP/(ERASE)** (■) button.

Measures 1 – 4 of the left-hand part are now recorded.

For second and later overdub recordings, pressing the **STOP/(ERASE)** (■) button will make the counter display return to “0”.

Step 4

Press the **PLAY** (▶) button and listen to the playback.

If you make a mistake ...

If you make a mistake while recording, it is possible to erase only the notes recorded on the second time and then re-record. The procedure is the same as above when you erased the first recorded part. This will erase only the notes of the second recorded part, and leave the notes you previously recorded. Repeat [Step 1] – [Step 3] to re-record correctly.

★When the erase procedure is used once, it erases only the most recently recorded notes.

When the erase procedure is used a second time (before recording any new notes), all data on the recording track will be erased.

● Recording the third part

For the third part, we will record the four measures of the right-hand part while listening to the left-hand parts already recorded.

Step 1

Simultaneously press both the **REW** (◀◀) and **FWD** (▶▶) buttons to return to the beginning.

Step 2

As you did when recording the first and second parts, press the **REC/(EXCHANGE)** button and then press the **PLAY** (▶) button, or begin playing the keyboard.

The first and second parts will be played back and recording will begin.

Play the right-hand part.

Step 3

Press the **STOP/(ERASE)** (■) button.

Measures 1 – 4 of the right-hand part have now been recorded.

The counter display will return to “0”.

Step 4

Press the **PLAY** (►) button and listen to the playback.

If you make a mistake ...

If you make a mistake while recording, you can erase the notes of the third part only (just as you did when recording the first and second part).

The erase procedure will erase the third part, while the first and second parts remain on the recording track (track 1). Repeat [Step 1] – [Step 3], and re-record the part correctly.

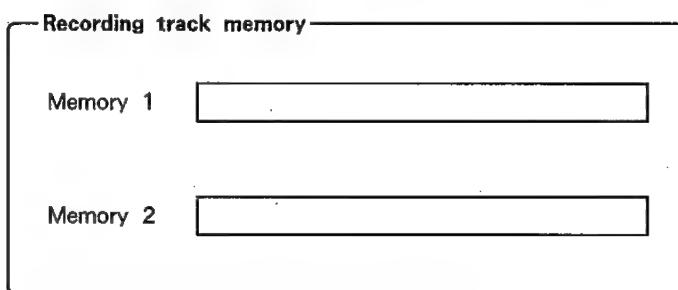
★If after erasing the third part, you then erase once again, the first and second parts (the first and second recordings) will also be erased.

★For long recording, merging (P.26) will require a few seconds.

■ Overdub recording

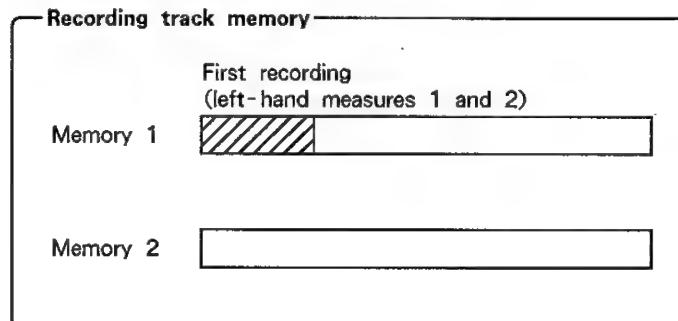
Here we will explain the process of "overdub recording".

The front panel of the Q-50 has only a single button for track 1, but the internal memory is actually divided into two sections.



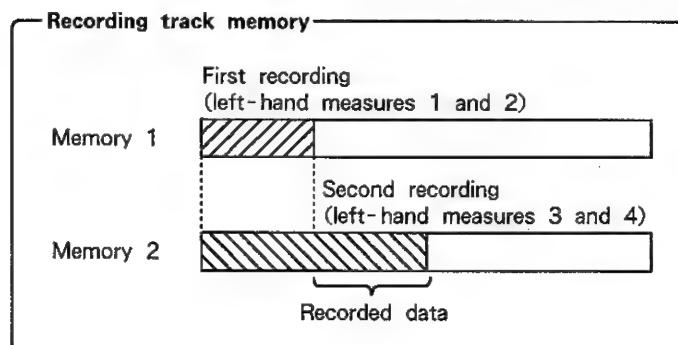
**Memory 2 is used only when overdubbing.*

The first recording is recorded into memory 1.



← End first recording

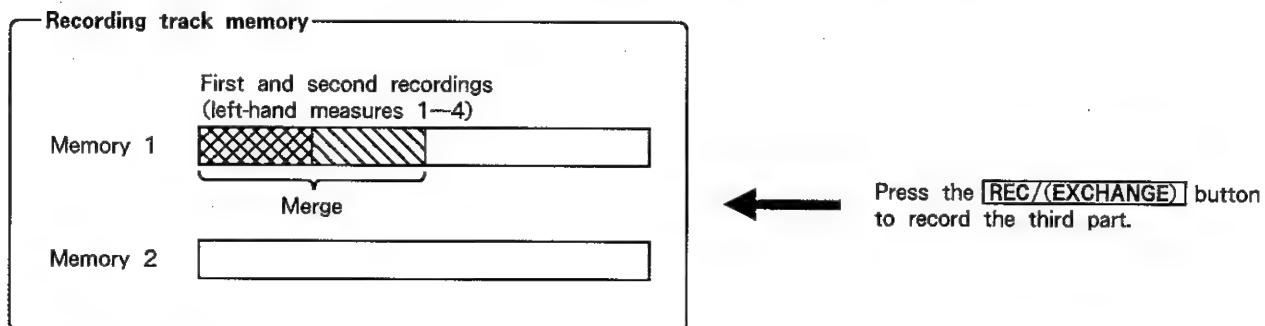
Return the counter and record the second part. However, the second recording is recorded into memory 2, not memory 1.



← End second recording

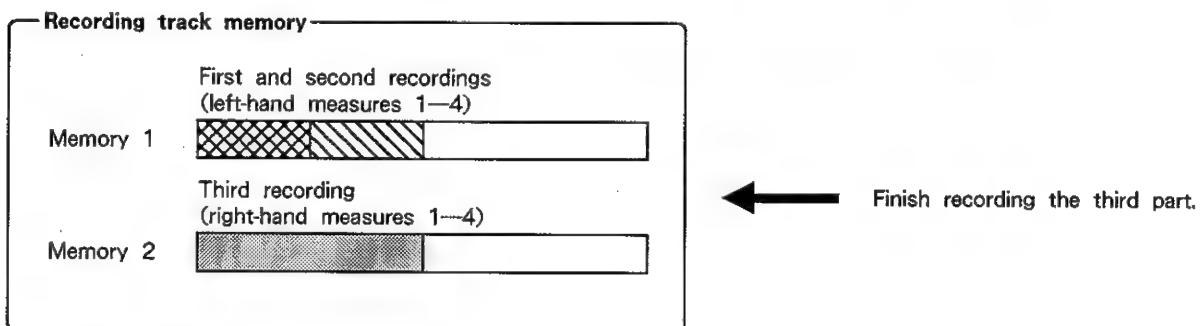
If you erase now, only the contents of memory 2 will be erased. If you erase once again, memory 1 will also be erased.

When you press the **REC/(EXCHANGE)** button for the third recording, the contents of the second recording will be moved into the recording track memory and combined with the first recording (this is known as "merging"). The counter will return to "0".



The counter display will return to "0".

When you press the **PLAY** (▶) button and record, your playing will be recorded into memory 2.



If you now erase, only the contents of memory 2 will be erased (as before). If you erase once again, memory 1 will be erased as well.

By repeating these operations, you can overdub as many times as you like. Erasing will always erase memory 2 first, and then erase memory 1. In other words, for the second and later recordings, memory 2 will always contain the newest recorded notes. The first erasure will erase this newest recording. The second erasure will erase the contents of memory 1 as well.

Exchanging Tracks

Next we will use the track exchange function so that the right-hand part and left-hand part can be played back independently.

Our explanation will use the same musical example as we did for overdubbing (page 17).

■ Recording the left-hand part

First we will record measures 1 – 4 of the left-hand part.

● Recording standby

Step 1

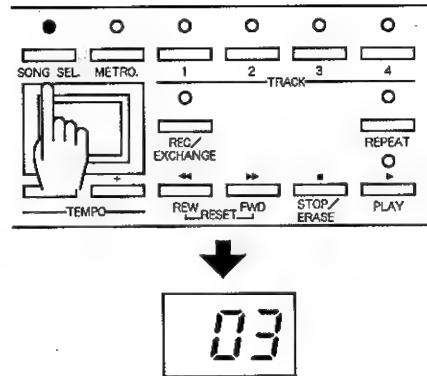
Select the song number.

Select the song number (1 – 16) that you wish to record.

Each time you press the **SONG SEL.** button, the number in the display (the song number) will change as follows;

[01] → [02] → [03] → ⋯ [16] → [01] ⋯

For this example, select "3".

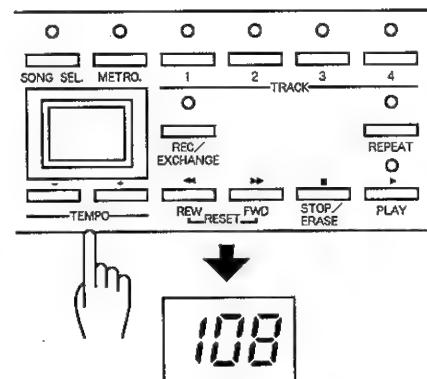


Step 2

Set the tempo.

As you did for overdub recording, press the TEMPO buttons **[−]** **[+]** to set the tempo to $\text{J}=108$.

If desired, you can set $\text{J}=108$ as the standard tempo (see page 18).

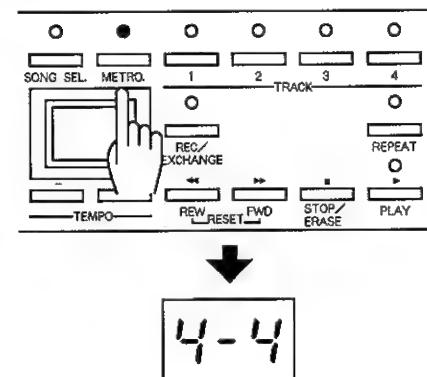


Step 3

Set the metronome.

As you did for overdub recording, set the metronome to 4 – 4.

If desired, you can set 4 – 4 as the standard time signature (see page 20).

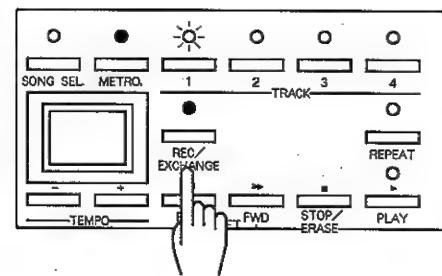


● Start recording

Step 1

Press the **REC/(EXCHANGE)** button.

The LED will light and the recording track (track 1) LED will begin blinking.

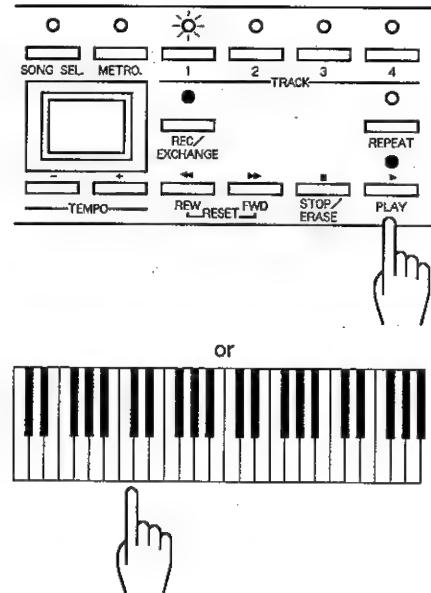


Step 2

Start recording.

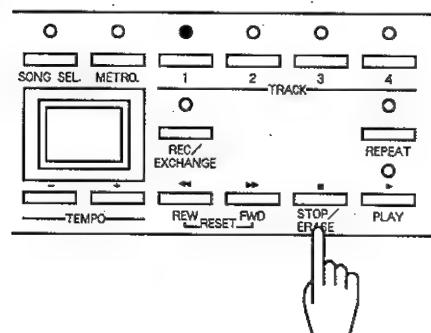
You can start recording either by pressing the **PLAY** (=) button and then beginning to play, or by simply playing the keyboard to make recording begin automatically.

When recording begins, the display counter will advance.



Step 3

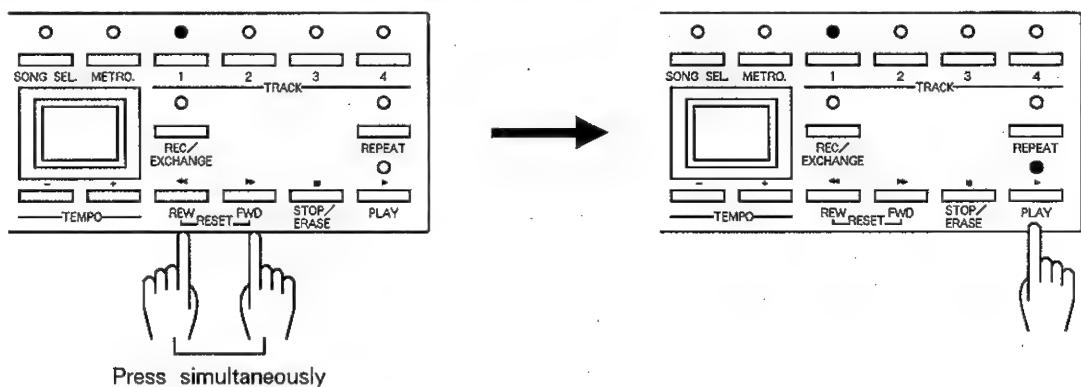
Press the **STOP/(ERASE)** (■) button when you are through recording.



★The procedure up to this point is the same as explained in "Basic Operation" (mode 1).

Step 4

Return the counter to the beginning, and playback.

**If you make a mistake ...**

If you make a mistake while recording, erase the recording track and re-record.

■ Exchanging the left-hand part

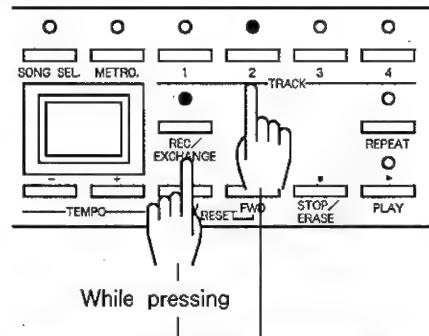
To exchange tracks, use the **REC/(EXCHANGE)** button that you have been using to record. This function allows you to exchange the contents of any track 2–4 with the contents of the recording track (track 1). In this example, we will exchange the contents of the recording track (track 1) and track 2.

Step 1

While pressing the **(REC)/EXCHANGE** button, press the button of the track you want to exchange (in this example, button **2**).

The contents of the tracks will be exchanged, and the display counter will return to "0". If, as in this example, track 2 had no data, the recording track (track 1) will now be empty.

For long recording, exchanging will require a few seconds.



While pressing **(REC)/EXCHANGE** button, press the button of the track that you wish to exchange.

■ Recording the right-hand part

Next we will record measures 1–4 of the right-hand part while listening to the playback of the left-hand part (track 2).

Step 1

Press the track **2** button.

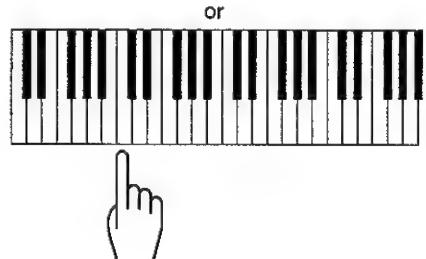
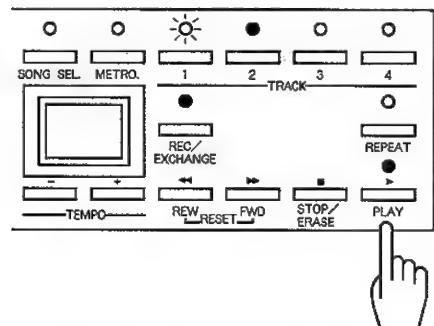
If the track 2 LED is already lit, there is no need to press the button.

Step 2

Press the **REC/(EXCHANGE)** button.

Step 3**Start recording.**

The contents of the left-hand part (track 2) will playback. At the same time the recording track (track 1) will begin recording. Play the right-hand part while listening to the left-hand part.

**Step 4**

Press the **STOP/(ERASE)** (■) button.

Step 5

Return the counter to the beginning and playback.

If you make a mistake ...

If you make a mistake while recording, erase the recording track and re-record.

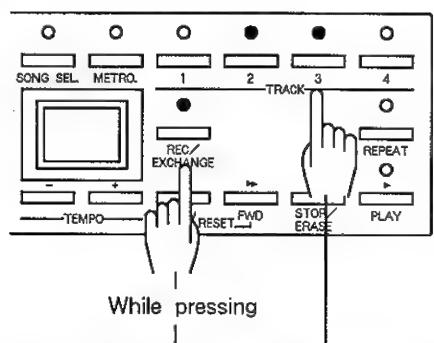
■ Exchanging the right-hand part

As you did for the left-hand part, exchange the right-hand part recorded on track 1 with the contents of track 3.

Step 1

While pressing the **(REC)/EXCHANGE** button, press the button of the track you wish to exchange. (In this example, press the track **3** button.)

The contents of tracks 1 and 3 will be exchanged.



While pressing the **(REC)/EXCHANGE** button, press the track **3** button.

■ Playback

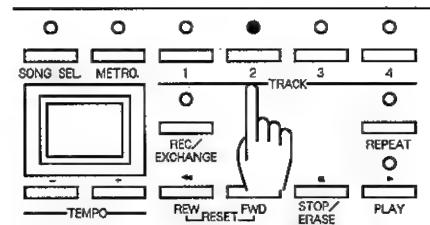
With the procedure so far, track 2 now contains the left-hand part and track 3 contains the right-hand part. This means that, depending on how you select track 2 and track 3 for playback, you will be able to hear just the right-hand part, just the left-hand part, or the parts of both hands together.

In this example, we will playback only the left-hand part, and practice the right-hand part while listening to the left-hand part. Once you are able to play it correctly, you can playback the right-hand part and practice the left-hand part.

Step 1

Press the track **2** button.

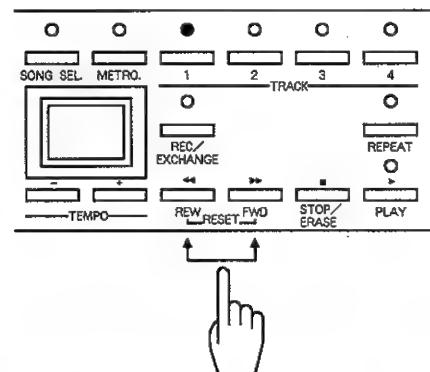
If the track 2 LED is already lit, there is no need to press the button. If the LEDs of other tracks are lit, press their buttons to turn the LEDs off. (Only the LED of track 2 should be lit.)



Step 2

Set the counter.

Set the counter to the position from which you want to start playback.

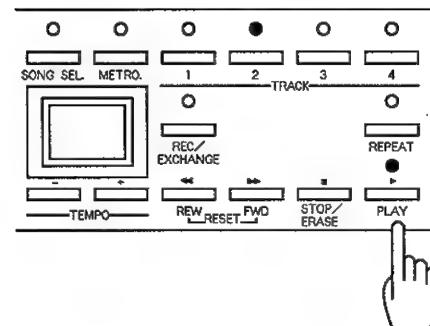


Press either button, or both at once

Step 3

Press the **PLAY** (►) button.

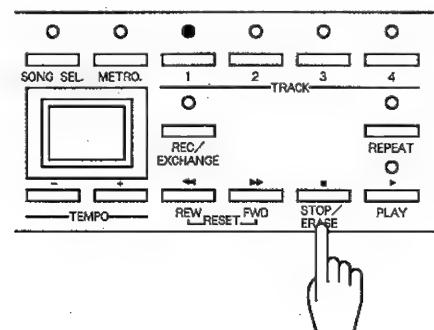
The left-hand part will be played back, so you can play the right-hand part along with it.



★If you press **REPEAT** when playing back, you can continue practicing the song over and over.

Step 4

Press the **STOP/(ERASE)** button.



★In this example, track 4 and the recording track (track 1) are empty. You can continue recording on them if you wish.

ABOUT MIDI

■ How can MIDI be used?

Here is an example. If you connect the MIDI terminals of two keyboards, playing one keyboard can make the other keyboard produce sound. In other words, MIDI allows you to control other instruments.

■ Connections

A special cable is used to connect MIDI instruments. The Q-50 MIDI terminals have the following three functions.

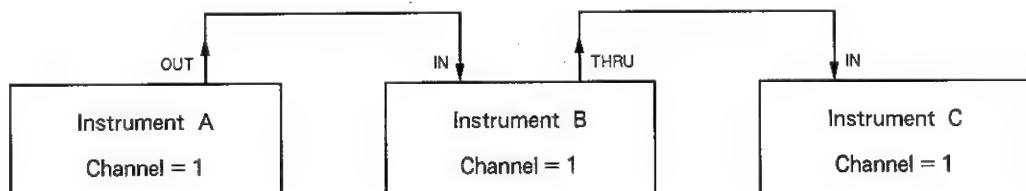
- IN This terminal receives MIDI signals (musical data, etc.).
- OUT This terminal transmits MIDI signals (musical data, etc.).
- MIX OUT This terminal transmits the combination (mix) of the data received at MIDI IN and the data transmitted from MIDI OUT.

Some devices (but not the Q-50) also have a MIDI THRU terminal, which re-transmits the data received at MIDI IN. Depending on how you are using the equipment, these MIDI terminals can be connected in different ways.

■ Connecting two or more devices

Musical data etc. transmitted via MIDI includes a "channel number" which specifies the MIDI instrument for which the data is intended. This is similar to the channel of a television receiver. If the channel of the receiver matches the channel of the transmitter, the data will be received. MIDI has sixteen channels (1 – 16). By setting each instrument to a different channel, you can transmit musical data to a specific instrument.

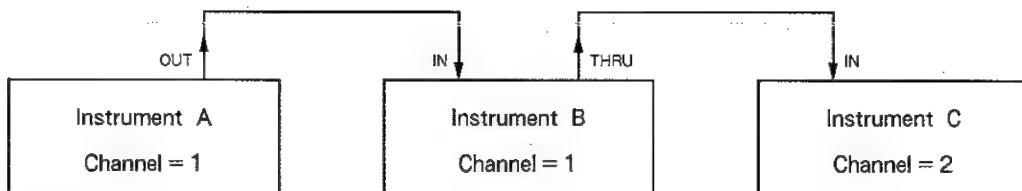
The following diagram shows how three instruments can be connected so that instrument A simultaneously controls both instruments B and C.



Now we will set the reception channel of instrument C to "2". Instruments A and B have the same channel, so instrument A will control instrument B.

However, instruments A and C have different channels, so instrument A will not control instrument C.

In this way, channels make it possible for you to control specific instruments.



■ More about MIDI

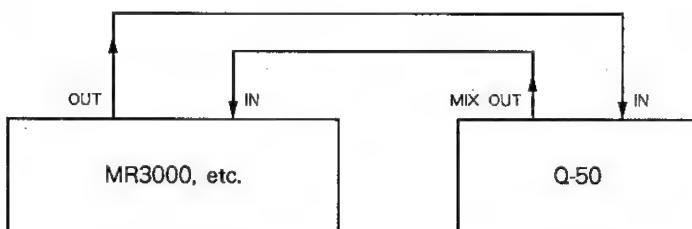
Now that you understand the basics of MIDI, here are some of the ways in which the Q-50 can be used with MIDI instruments.

● By connecting the Q-50 to a multi-timbral instrument (such as a Kawai MR3000 digital piano)

By connecting the Q-50 to a multi-timbral instrument, you can simultaneously play two or more different musical parts using different sounds.

① Use the Q-50's MIX OUT as in the following connection diagram. Turn on the multi-timbral mode of the digital piano (Kawai MR3000), turn its local control setting off, set each sound to receive an appropriate MIDI channel, and use the Q-50 in mode 2 to overdub record.

When you finish recording the first part, select the channel to be received by the next sound and record the next part.



★Multi-timbral mode:

A multi-timbral instrument can simultaneously receive MIDI data on two or more channels, and play the notes using a different sound for each channel.

★Local control:

Local control On ... When you play the keyboard, the instrument will produce sound and will also transmit data from MIDI OUT to control other MIDI instruments.

Local control Off ... When you play the keyboard, the instrument will not produce sound, but will transmit data from MIDI OUT to control other MIDI instruments. However, even when local control is turned off, the instrument can be controlled by data received at MIDI IN.

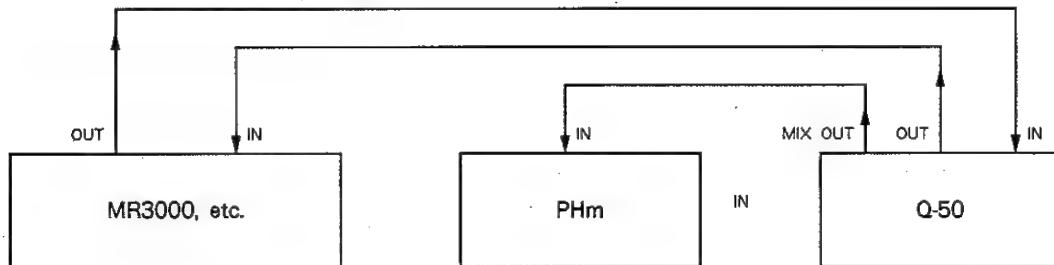
★The owner's manual of your digital piano will explain how to use its multi-timbral functions, MIDI channel settings for each voice, and local control settings.

② When you have finished recording all the parts, make the Q-50 playback. You can also play along during playback.

● Using the Q-50, a digital piano (MR3000, etc.), and a Kawai PHm tone generator module.

You can connect a PHm tone generator module for an even wider range of sounds.

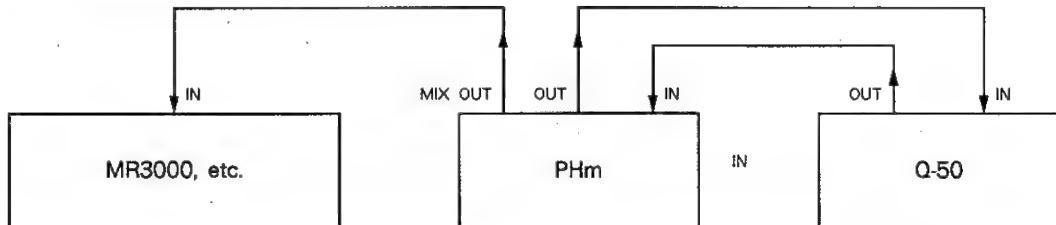
① Make connections as shown below.



② If you set the digital piano to a different MIDI channel when you record each part, the digital piano and the PHm will each play different parts in response to the data.

For example while the Q-50 is playing back data to control the PHm, you can use the digital piano to play along, or to record additional parts.

★Modify the connections as shown in the following diagram, make tempo settings for the PHm, and set the Q-50 clock to EXT. In this setup, the Q-50 will automatically start, stop, and keep in tempo with the PHm. However it is not possible to start playing back in synchronization with the PHm rhythm from the middle of a song.



★When the clock is set to EXT, it is not possible to fast-forward during playback.

★For details on the various settings, refer to the manuals for the digital piano and the PHm.

TROUBLESHOOTING

If you have problems with the Q-50, check the following points. Problems may result from incorrect operation or connections. If even after checking these points the problem remains, contact the dealer where you purchased the Q-50 or a nearby Kawai service center.

Problem	Main Symptom	Action
Cannot record or playback	<ul style="list-style-type: none"> The power is not connected. MIDI cables are not correctly connected. A track is not selected for playback. The clock setting is incorrect. The MIDI channel setting during recording does not match the MIDI channel setting during playback. The recording capacity was exceeded. 	<ul style="list-style-type: none"> Connect the power. Correctly connect the MIDI cables. Select the track you wish to playback. When using another MIDI device to control the tempo of the Q-50, select <EXT>; if not, select <INT>. Set your MIDI instrument to the same channel setting as when recording. In mode 1, the recorded data will be lost. Re-record it from the beginning. In mode 2, data will be recorded as far as memory capacity permits. Notes beyond this will not be recorded. After erasing practise tracks or other tracks, record again.
Cannot overdub record	<ul style="list-style-type: none"> The Q-50 is not set to mode 2. When merging was executed, the memory capacity was exceeded. <p>Merging occurs at the following times.</p> <ul style="list-style-type: none"> When you press the [REC / EXCHANGE] button after the second or later overdub recording. When you exchange tracks. When you move the MODE switch from mode 2 to mode 1. When you change the song number. 	<ul style="list-style-type: none"> Set the MODE switch to mode 2. The first-recorded performance remains in memory. If you have not merged yet, you can playback the last-recorded performance as well. If you want to continue overdubbing, you must first erase unwanted tracks or tracks of other songs.
Buttons other than STOP will not function	<ul style="list-style-type: none"> The Q-50 is set to chain repeat. 	<ul style="list-style-type: none"> Press the [STOP / (ERASE)] button to stop playback and then perform the desired operations.
Cannot save data	<ul style="list-style-type: none"> The disk tab has been broken off. 	<ul style="list-style-type: none"> Either put a piece of tape over the tab so the disk can record data, or use a different disk.
Cannot load data	<ul style="list-style-type: none"> The disk is not the correct type for the Q-50. The disk does not contain data. 	<ul style="list-style-type: none"> Use a disk intended for the Q-50. Use a disk which contains data.

ERROR CODES

If you attempt an incorrect operation or if the Q-50 malfunctions, one of the following error codes will appear in the display. Consult the following chart to learn the cause of the error, press the **STOP/(ERASE)** button, and take the appropriate action.

Error Code	Reason	Action
E01, E02, E04	MIDI-related malfunction	The recording track memory has been erased. The memory of other parts will remain. So, save the date to a disk, check MIDI connections, and turn the power on again.
E03, E05	MIDI-related malfunction	The memory of all parts has been erased. Check MIDI connections and turn the power on again.
E10	Memory has filled up while recording. <ul style="list-style-type: none"> • While using mode 1 • While using mode 2 	When the counter stops, this will be briefly displayed. Recording will automatically stop. The data that was being recorded will be lost. Re-record from the beginning. Recording continues until all memory is used. If this error code appears when merging, the last-recorded data will be erased. If you want to continue recording, you must first erase unwanted tracks or tracks of other songs.
E11	In overdub recording, you tried to continue overdubbing when the recording track memory was already full.	The overdubbing memory has been erased. either exchange the data with a playback track, or save the data to disk and re-record.
E18	You pressed LOAD or SAVE when a disk was not inserted.	Insert a disk and repeat the operation.
	You tried to save to disk even though no data was recorded.	Record data, and then save it to disk.
	You tried to save data to a disk whose tab is broken off.	Either use a different disk, or put tape over the disk tab so you can save data on it.
	You tried to load data from a disk that contained no data.	The entire contents of memory has been erased. Insert a disk that contains data, and repeat the operation.
E19	You tried to load from a disk not intended for the Q-50.	The entire contents of memory has been erased. Insert a disk for the Q-50.

Error Code	Reason	Action
E20	The disk is faulty.	The entire contents of memory has been erased. Use a different disk, and try again.
	An internal Q-50 malfunction has occurred.	If all disks produce this error code, a malfunction has occurred inside the Q-50. Contact the dealer where you purchased it, or a nearby Kawai service center.
E21	You removed the disk while the indicator was lit.	If this error occurred while reading data from disk, the entire contents of memory has been erased. Re-insert the disk and try the operation again. Never remove the disk while the indicator is lit.
	The quick disk drive has malfunctioned.	The entire contents of memory has been erased. Contact the dealer where you purchased the Q-50 or a nearby Kawai service center.

★ If errors E01–05 appear repeatedly, contact the dealer where you purchased the Q-50 or a nearby Kawai service center.

MODEL Q-50 MIDI Implementation Chart

Function....		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1-16 X	1-16 X	No basic channel
Mode	Default Messages Altered	Mode 1 Omni on, Omni off *1 ***	Mode 1 Omni on, Omni off *2 X	
Note Number	: True Voice	0 - 127 ***	0 - 127 ***	
Velocity	Note ON Note OFF	9nH V=1 - 127 9nH V=φ	9nH V=1 - 127 9nH V=φ, 8nH	
After Touch	Key's Ch's	○ ○	○ ○	
Pitch Bender		○	○	
Control Change		○(0 - 120)	○(0 - 120)	
Prog Change	True #	○(1 - 127) ***	○(1 - 127)	
System Exclusive		○	○	
Common	: Time Code	X	X	
	: Song Pos	X	X	
	: Song Sel	X	X	
	: Tune	X	X	
System Real Time	: Clock	○ *3	○ *4	
	: Commands	○	○	
Aux Message	: Reset All Controllers	○	○ *2	
	: Local ON/OFF	○	○	
	: All Notes OFF	X *5	○	
	: Active Sense	X	X	
	: Reset	X	X	
Notes		*1 Only the received data is transmitted. *2 Received and stored but has no effect. *3 CLOCK=INT *4 CLOCK=EXT *5 May be transmitted if a malfunction occurs.		

SPECIFICATIONS

Memory	Internal: 16 songs, approximately 11,000 notes Disk: 2.8 inch quick disk One side; 16 songs, approximately 11,000 notes Both sides; 32 songs, approximately 22,000 notes
Display	3-place LED
Tempo	$J=20-250$ (standard tempo can be set)
Time Signature	1-4, 2-4, 3-4, 4-4, 6-8, OFF (standard time signature can be set)
Clock	Switchable INT/EXT
Mode	Switchable mode 1/mode2
Tracks	1 track (record/playback), 3 tracks (playback only)
Recording	Overdubbing function, Keyboard start function
Playback	Repeat playback, Chain playback functions
Disk	Load/Save
Terminals	MIDI IN, OUT, MIX OUT, Power Supply terminal
Dimensions	219mm(W) × 60mm(H) × 186.5mm(D)
Weight	1.5Kg
Included Items	AC adapter × 1, quick disk(KQD-1) × 1, disk drive protection sheet × 1, MIDI cable (1.5m) × 2

KAWAI